

REMARKS

Claims 1-21 are pending in the present application.

In the Office Action, the Examiner rejected claims 1-10 under 35 USC § 101 because the claimed invention is allegedly directed to non-statutory subject matter. Applicants respectfully disagree and submit that the subject matter set forth in claims 1-10 falls under one of the safe harbors set forth in §2106 of the MPEP because independent claim 1 requires that measurements of physical objects or activities are transformed into computer data. In particular, independent claim 1 sets forth processing a plurality of workpieces to form at least one feature on each workpiece, measuring a plurality of characteristics of the feature, and constructing a covariance matrix including diagonal and non-diagonal terms for the plurality of characteristics measured. Accordingly, Applicants submit that the claims 1-10 are directed to statutory subject matter and request that the Examiner's rejections of these claims under 35 USC § 101 be withdrawn.

In the Office Action, claims 5-6 and 15-16 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. In particular, the Examiner alleges that a person of ordinary skill in the art would not know how to determine a sampling frequency of a sampling plan as a function of a singular value of a covariance matrix. Applicants respectfully disagree. As stated in the specification, the sampling frequency may be a linear or a non-linear function of the singular value. Applicants submit that a person of ordinary skill in the art having benefit of the present disclosure would be able to determine the linear or non-linear relationship between the sampling frequency and the singular value using routine experimental techniques, empirical relations, and/or known theoretical relations. Applicants submit that the specification does enable claims 5-6 and 15-16 and request that the Examiner's rejections of claims 5-6 and 15-16 under 35 U.S.C. § 112, first paragraph, be withdrawn.

In the Office Action, claims 1-4, 7-14, and 17-21 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Pasadyn (U.S. Patent No. 6,738,682). The Examiner's rejections are respectfully traversed.

Independent claims 1, 11, and 21 set forth, among other things, processing a plurality of workpieces to form at least one feature on each workpiece, measuring a plurality of characteristics of the feature, and constructing a covariance matrix including diagonal and non-diagonal terms for the plurality of characteristics measured.

In contrast, Pasadyn describes an error covariance matrix that includes diagonal elements that measure the current amount of uncertainty in corresponding state estimates. However, the equations used to define the error covariance matrix "do not depend on the actual numerical values that are measured or on the current state of the process. They simply define the effects of measuring different quantities give some assumptions about the structure of the underlying system." See Pasadyn, col. 36, ll. 36-58. Consequently, Applicants respectfully submit that Pasadyn fails to teach or suggest constructing a covariance matrix including diagonal and non-diagonal terms for the plurality of characteristics measured, as set forth in independent claims 1, 11, and 21.

For at least the aforementioned reasons, Applicants respectfully submit that claims 1-4, 7-14, and 17-21 are not anticipated by Pasadyn and request that the Examiner's rejections of these claims under 35 U.S.C. § 102(e) be withdrawn.

Applicants also note that according to MPEP §706.02(I)(1), "effective November 29, 1999, subject matter which was prior art under former 35 U.S.C. 103 via 35 U.S.C. 102(e) is now disqualified as prior art against the claimed invention if that subject matter and the claimed invention 'were, at the time the invention was made, owned by the same person or subject to an

obligation of assignment to the same person.' " The present application was filed on or after November 29, 1999. Furthermore, the present application and Pasadyn were, at the time the present invention was made, owned by the same entity or subject to an obligation of assignment to the same entity. Thus, Applicants respectfully submit that Pasadyn is not available as prior art in any obviousness determination.

For the aforementioned reasons, it is respectfully submitted that all claims pending in the present application are in condition for allowance. The Examiner is invited to contact the undersigned at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

Date: _____

9/12/05



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